

Amendment to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for scheduling data packets comprising:
segmenting each data packet into data segments;
assigning a slack value to each data segment of a packet, wherein the slack value is a function of a deadline for transmitting each data segment of the packet and an estimated transmission time necessary for transmission of the packet; and
scheduling data segments for transmission based on slack values of data segments.
2. (Original) The method according to claim 1, further comprising:
decreasing the slack value of a segment if a transmission opportunity is missed.
3. (Original) The method according to claim 1, wherein the slack value is measured in terms of the amount of transmission opportunities that can be missed.

4. (Original) The method according to claim 1, further comprising:
looking ahead to locate packets which will exceed requirements and deleting such packets.

5. (Currently Amended) A transmission apparatus comprising:
a plurality of data streams;
a transmitter connected to said plurality of data streams;
a scheduler for determining which data stream will be serviced by said transmitter; and wherein
said scheduler ~~selecting~~ selects a data stream for service based on a slack value of data segments in each stream, wherein the slack value is a function of ~~the~~ a deadline for transmitting each data segment and ~~the~~ an estimated transmission time necessary for the transmission of said data segments of the selected data stream.

6. (Original) The apparatus according to claim 5, wherein said scheduler segments data packets in said data streams into data segments.

7. (Original) The apparatus according to claim 5, wherein said scheduler decreases slack values when a transmission opportunity is missed.

8. (Currently Amended) The apparatus according to claim 5, ~~further~~ comprising a slack value assigner for assigning said slack values to said data segments.

9. (Currently Amended) The method of transmitting data comprising:
connecting a transmitter to a plurality of data streams for transmission;
assigning slack values to data in said data streams, said slack values being a
function of a deadline for transmitting ~~of~~ said data and an estimated transmission
time necessary for transmission of said data of said data streams; and
scheduling the data streams for transmission by said transmitter, said
scheduling being determined by said slack values.

10. (Original) The method according to claim 9, wherein data packets in said
data streams are segmented into data segments.

11. (Original) The method according to claim 10, wherein slack values are
assigned to each data segment.

12. (Original) The method according to claim 11, wherein each slack value is
decreased for every transmission opportunity missed.

13. (New) The method according to claim 1 wherein:
the estimated transmission time is a minimum transmission time
necessary for transmission of each data segment of the packet.

14. (New) The method according to claim 2 wherein:
the estimated transmission time is a minimum transmission time
necessary for transmission of each data segment of the packet.
15. (New) The method according to claim 3 wherein:
the estimated transmission time is a minimum transmission time
necessary for transmission of each data segment of the packet.
16. (New) The method according to claim 4 wherein:
the estimated transmission time is a minimum transmission time
necessary for transmission of each data segment of the packet.
17. (New) The apparatus according to claim 5 wherein:
the estimated transmission time is a minimum transmission time
necessary for transmission of the data segments of the selected data stream.
18. (New) The apparatus according to claim 6 wherein:
the estimated transmission time is a minimum transmission time
necessary for transmission of the data segments of the selected data stream.
19. (New) The apparatus according to claim 7 wherein:
the estimated transmission time is a minimum transmission time
necessary for transmission of the data segments of the selected data stream.

20. (New) The apparatus according to claim 8 wherein:

the estimated transmission time is a minimum transmission time necessary for transmission of the data segments of the selected data streams.

21. (New) The method according to claim 9 wherein:

the estimated transmission time is a minimum transmission time necessary for transmission of said data of said data streams.

22. (New) The method according to claim 10 wherein:

the estimated transmission time is a minimum transmission time necessary for transmission of said data of said data streams.

23. (New) The method according to claim 11 wherein:

the estimated transmission time is a minimum transmission time necessary for transmission of said data of said data streams.

24. (New) The method according to claim 12 wherein:

the estimated transmission time is a minimum transmission time necessary for transmission of said data of said data streams.